## ABSTRACT OF THE DISCLOSURE

A transmission device which cross connects channels on a synchronous multiplex transmission network which forms a ring, and which performs restoration of communication by looping back signals in a protection path when a failure occurs includes a memory area which stores information for determining whether an alarm indication signal needs to be inserted in a channel or not, wherein the size of the memory area corresponds to the number of 10 channels targeted for the restoration, and a part which inserts said alarm indication signal in a channel by switching results of the determination according to predetermined information. Further, the transmission device may switch and recover a path 15 without skipping an event which arises between polling accesses by a CPU of said transmission Furthermore, the transmission device may include a part, provided in each interface part, which performs phase adjusting of channel signals. 20